II. SPECIFICATION AMENDMENTS

Please replace the paragraph/section beginning on page 1, line 1

~~DEVICES~~ SECURE E-COMMERCE TRANSACTIONS UTILIZING SET SECURITY
PROTOCOLS AND EMV CRYPTOGRAMS

Page 10, line 26, to Page 11, line 6

This initiates a request for payment startup message ~~22~~ 29 which
is sent from the mobile station to the merchant server 12. This
signal can either be of a standard type in which case the
merchant server 12 responds with a payment initialisation message
23 which indicates that payment is to be carried out in
accordance with the EMV standard or alternatively the mobile
phone 10 may already be provided with the information that the
merchant server supports only EMV transactions. In this case the
startup message ~~22~~ 29 could be adapted to refer specifically to
the startup of an EMV transaction.

Page 11, line 7-17

In order to indicate that the merchant server supports EMV
transactions the payment initialisation message 23 is a modified
SET message. The difference in architecture, ie the ability of
the merchant server to accept SET or EMV transactions can be
notified in an additional field in the standard SET payment
initialisation message. This modified initialisation message 23
can alternatively include an additional or a modification of an
existing SET data field from the standard SET payment
initialisation message 15 shown in figure 1. For example the
standard SET specification specifies a field SET-brand which is
transferred from the merchant to client informing the user

whether Visa, Master Card or other card be used and giving a URL
for a logo. This field can be modified to having the text "EMV"
and URL for the merchant address. Or a new field EMV-merchant
with URL as value may be added to the message.

Page 12, line 33, to page 13, line 14

In order to do this the EMV card handling process 24 calculates
an EMV cryptogram for use in encrypting and decrypting the
transferred data. The EMV cryptogram is calculated using data
from the modified SET payment initialisation message 23 and
information stored in the mobile phone 10 itself. This is
similar to that described in relation to Figure 1. Once
calculated this EMV cryptogram can be communicated to the
merchant server using an open session message 25. Thereafter the
merchant server 12 and mobile phone 10 can communicate together
via the gateway 11 as is known in the art utilising various
signals (not shown). This includes a purchase request signal 26
from the merchant server 12 to a card issuer internet payment
gateway (IPGW) 27. This is via standard EMV protocol signals.
The gateway forwards the message to the card issuer server. The
card issuer can then authorise a transaction depending upon the
credit rating or status of the subscriber's account. The result
28 of this authorisation is transmitted to the merchant server
via the IPGW 27. The merchant server 12 then notifies the user
(would-be purchaser) via a standard acknowledge result message ~~22~~
<u>30</u>. It will be understood that the IPGW is only one of a number
of ways in which merchants and/or banks could be contacted.